

Fairfax County Supplemental Retirement System

A Pension Trust
Fund of Fairfax
County Virginia

Comprehensive Annual Financial Report

For the Fiscal Year July 1, 1997 to June 30, 1998

Produced by the:
Fairfax County Retirement Administration Agency
10680 Main Street, Suite 280
Fairfax VA 22030

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INTRODUCTORY SECTION



**FAIRFAX
COUNTY**

**BOARD OF TRUSTEES
SUPPLEMENTAL RETIREMENT SYSTEM**

10680 Main Street, Suite 280
Fairfax, Virginia 22030-3812

Telephone: (703) 246-2396 (800) 333-1633 FAX: (703) 273-3185

V I R G I N I A

December 28, 1998

Dear Members of the Board of Trustees:

We are pleased to submit to you the annual report of the Fairfax County Supplemental Retirement System ("System") for the fiscal year ended June 30, 1998. We hope this annual report will aid in understanding the structure and evaluating the status of the System. The System's management is responsible for the accuracy of financial information contained herein.

The annual report for fiscal year 1998 consists of five sections: an Introductory Section which contains a transmittal letter along with the identification of the organization; a Financial Section which contains the opinion of the independent auditors, the financial statements of the System and required supplementary information; an Investment Section which contains investment results; the Actuarial Section which contains the independent actuary's certification letter, a summary of the results of the most recent actuarial valuation, and actuarial procedures and assumptions; and the Statistical Section which contains information regarding the System membership.

History

The Fairfax County Supplemental Retirement System was established on July 1, 1955, as a cost-sharing multiple-employer public employee retirement system providing defined benefit pension plan coverage for full-time and certain part-time Fairfax County and Fairfax County Public Schools employees who are not covered by the Fairfax County Police Officers Retirement System, the Fairfax County Uniformed Retirement System, the Educational Employees' Supplementary Retirement System of Fairfax County (ERFC), or the Virginia Retirement System (VRS). There were 12,606 active members and 3,361 retirees participating in the System as of June 30, 1998.

Benefit Provisions

The benefit provisions of the System are established by County Ordinance. The System provides normal service retirement and early service retirement benefits for members who attain age or service requirements. Coverage for service-connected disability benefits is immediate upon membership in the System. Ordinary (non-service related) disability benefits are provided after the attainment of five years of service. Members are vested after five years of service and are eligible for the benefits at the early or normal service retirement date.

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Capital Markets, Economic Conditions and Outlook

Fiscal 1998 Review

Fiscal 1998 ending June 30 was another good year for capital markets and almost a replay of fiscal 1997. The S&P 500 Index advanced 30.2%, marking the tenth consecutive fiscal year of positive returns for the Index and the fourth consecutive year of 25+% growth. US equity returns were again easily the best performer among major asset classes. US equity returns almost tripled the 10.5% return of the Lehman Brothers Aggregate Bond Index, and were nearly five times higher than the 6.4% achieved by the MSCI EAFE Index, the leading equity index of international developed markets.

Gains in 1998 were once again concentrated in the largest of the S&P 500 Index stocks, capping the fourth consecutive year that large-capitalization stocks outperformed small-cap stocks. The small-cap sector, as measured by the Russell 2000 Index, gained a more modest 16.5% for the fiscal year. The best-performing segment of the market was the large-cap S&P/BARRA Growth Index, which advanced 34.9% for the year. Large-cap "growth" stocks outperformed "value" stocks during 1998, but value had the advantage among both mid- and small-cap stock sectors. Once again the leadership within the stock market was very narrowly defined during the fiscal year, as the top ten performing stocks in the S&P 500 Index (mostly multinational, blue-chip stocks) accounted for 43% of the Index's return.

Economic conditions generally favored capital markets in fiscal 1998. This positive environment was bolstered by solid economic growth, as the Gross Domestic Product grew at better than 3.6% for the year. Consumer confidence reached a 30-year high, which fueled rising consumer spending. Strong corporate profits in 1998 led to new job creation and shrinking unemployment, which bottomed-out at 4.3%, a 24-year low. Declining interest rates, a cooperative Federal Reserve, and a Consumer Price Index that averaged only 1.6% over the past 12 months all contributed to the favorable capital market returns. International developments, however, roiled capital markets worldwide as several Asian countries experienced sharp economic, currency and confidence dislocations, causing the MSCI Emerging Markets Free Index to plummet 39% for the year. Japan was impacted by a deepening recession, weakening yen, and inability of the Japanese government to reform the banking system or stimulate the economy. Concern over this Asian crisis raised volatility in worldwide equity markets, but boosted US fixed-income markets as investors sought safe, liquid markets within which to weather the storm. US Treasury bonds were that safe haven. The 30-year Treasury Bond Index yield dropped 120 basis points from 6.8% at June 30, 1997 to 5.6% at June 30, 1998.

System

Against this economic backdrop, the System's assets advanced 17.2% for the fiscal year, a favorable absolute return and one not much below the outstanding 20.5% gain achieved in the previous year. The market value of the System increased from \$1,386.2 million on June 30, 1997 to \$1,623.0 million on June 30, 1998. The System ended the fiscal year with 55% in domestic and international equities, 32% in fixed-income securities, 10% in equity REITs and 3% in cash. Derivatives represented 12.7% of the portfolio, consisting primarily of triple A-rated collateralized mortgage obligations. These securities were not of the speculative or leveraged variety.

INTRODUCTORY SECTION

Outlook

Since the Bull Market began eight years ago on October 11, 1990, the S&P 500 Index has risen 283.8% on a price-only basis, or 19.0% annualized. The concept of "regression to the mean" suggests that the return of the S&P 500 Index should gravitate to the historic annual average of 11.2%. Indeed, after starting off fiscal 1999 by hitting record highs in mid-July, equity markets corrected sharply through the end of August, 1998, losing nearly 20% of value within two months. This correction was triggered by Russia's debt default and currency devaluation, which produced large losses for several US-based hedge funds, brokers and bankers. The Federal Reserve stepped in with three quick moves, dropping short-term interest rates 75 basis points to 4.75%. This action had the effect of calming worldwide capital markets, restoring liquidity to credit markets and confidence among consumers and allowing capital markets to rebound to former pre-correction levels. Going forward through fiscal 1999, we expect to see moderating economic growth, a slowdown in corporate profits, a slight pick-up in inflationary pressures, and continued volatility in capital markets.

The System's investments continue to be well-positioned and diversified. Any short-term downturn in the bond and equity markets would not have a material effect on the funded status of the System.

Financial Highlights

Internal and Budgetary Controls

The System's management is responsible for maintaining internal accounting controls to provide reasonable assurance that transactions are properly authorized and recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles. We believe the internal controls in effect during the fiscal year ended June 30, 1998, adequately safeguard the System's assets and provide reasonable assurance regarding the proper recording of financial transactions. In addition, the budget for the System is annually presented to and approved by the Board of Trustees and the County's Board of Supervisors.

INTRODUCTORY SECTION

Additions

The primary sources of additions for the System include member and employer contributions as well as net investment income. Total contributions and net investment income for fiscal year 1998 totaled \$287.3 million, an increase of \$8.6 million versus fiscal year 1997.

Table 1. Contributions and Investment Income

	FY 1998 (millions)	FY 1997 (millions)	Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Employer Contributions	\$ 31.0	\$ 29.9	\$ 1.1	3.7%
Member Contributions	18.0	17.2	0.8	4.6%
Net investment Income	238.3	231.6	6.7	2.9%
	\$287.3	\$ 278.7	\$ 8.6	3.1%

Contributions

Contributions from Fairfax County increased 3.7% over the prior year and produced 10.8% of total additions. The increase in employer contributions was attributable to a higher payroll base, offset slightly by a reduction in the contribution rate from 8.19% in FY 1997 to 8.12% in FY 1998. Member contributions increased 4.6% over the prior year due to the higher payroll base, contributing 6.3% to total additions.

Investments

The net investment income portion of total additions increased by \$6.7 million or 2.9% in fiscal year 1998. Dividend and interest income increased \$10.1 million or 21.4%. Realized and unrealized gains on investments decreased \$2.3 million or 1.3%. The market value of net assets increased to \$1,623.0 million from \$1,386.2 million.

Deductions

The deductions from the System include the payment of retiree and beneficiary payments, the refund of employee contributions to former members and administrative expenses. Deductions for fiscal year 1998 totaled \$50.5, an increase of \$4.1 million or 8.8% over the prior fiscal year.

Table 2. Deductions by Type

	FY 1998 (millions)	FY 1997 (millions)	Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Benefits	\$45.0	\$ 40.8	\$4.2	10.3%
Refunds	4.9	5.0	(0.1)	(2.0)
Administrative Expenses	0.6	0.6	—	—
	\$50.5	\$46.4	\$4.1	8.8%

INTRODUCTORY SECTION

The increase in benefit payments to \$45.0 million was mostly attributed to an increase in retirees. The number of retirees and beneficiaries increased to 3,361 at June 30, 1998 from 3,157 a year earlier. Retirees also received a 2.2% cost-of-living increase effective July 1, 1997.

Funded Status

An actuarial valuation of the System to determine funding requirements is performed annually. The System's funding policy provides for periodic employer contributions at actuarially determined rates which will remain relatively level over time as a percentage of payroll and will accumulate sufficient assets to meet the costs of benefit payments when due. The valuation of the System performed as of July 1, 1997 indicated that the ratio of assets accumulated by the System to total actuarial accrued liabilities for benefits increased from 97.7% to 99.2%.

The Actuarial Section contains further information on the results of the July 1, 1997 valuation.

Investment Policies and Strategies

The Board of Trustees has an adopted Statement of Investment Objectives and Policy. This Statement establishes the investment goals, guidelines, constraints and performance standards the Trustees will use when exercising its fiduciary duties to manage the investment assets of the System. The Board operates in conformity with the standard of care required in making investments as stated in the Code of Virginia §51.1-124.30.C.

The Board receives quarterly reporting from staff to ensure compliance with its stated objectives and policy. Staff also monitors the performance of the System and its investment managers; rate of return information is included in the Investment Section.

Securities of the System except for mutual funds and a short-term investment fund are held by State Street Bank and Trust Company, as agent, in the System's name. State Street Boston Corporation, the parent company, carries Financial Institution Bond insurance coverage including a Computer Crime Policy. An additional Excess Securities policy covers all risk of physical loss to securities.

INTRODUCTORY SECTION

Other Information

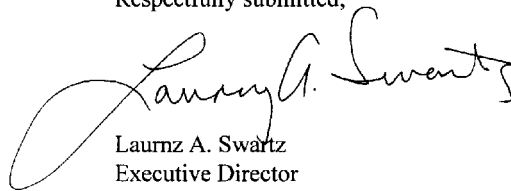
Independent Audit and Actuarial Certifications

An independent auditors' report and certifications from the actuary are included in this report.

Acknowledgements

The annual report of the Supplemental Retirement System was prepared by the System's staff under the leadership of the Board of Trustees. I would like to thank the staff who have worked hard throughout the year to ensure the successful operation of the System. This report is intended to provide complete and reliable information for determining the financial status of the System. It is being submitted to the Board of Supervisors and other interested parties.

Respectfully submitted,

A handwritten signature in black ink, reading "Laurnz A. Swartz". The signature is fluid and cursive, with the first name "Laurnz" being more prominent and the last name "Swartz" following in a similar style. The signature is positioned above the printed name and title.

Laurnz A. Swartz
Executive Director

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BOARD OF TRUSTEES

Robert C. Carlson
Chairman
R.C. Carlson Advisors - Principal
Term Expires: August 1, 2001

Vera L. Finberg
Vice Chairman
Fairfax County Library
Elected Member Trustee
Term Expires: June 30, 2001

Susan S. Planchon
Treasurer
Fairfax County Director of Finance
Ex officio Trustee

Gordon R. Trapnell, FSA
Actuarial Research Group - President
Term Expires: July 31, 1999

Ray N. Perrault, CLU, CEBS
Coordinator, Benefits Insurance
Fairfax County Public Schools
Ex officio Trustee

Peter J. Schroth
Fairfax County Personnel Director
Ex officio Trustee

James T. McIntyre, Jr.
McNair Law Firm, P.A.
Term Expires: July 31, 1998

Thomas M. Stanners
Retired
Term Expires: July 31, 2000

Robert Mears
Director of Finance
Fairfax County Public Schools
Elected Member Trustee
Term Expires: June 30, 1999

Jean D. Busboso
Elected Retiree Trustee
Term Expires: December 31, 1998

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ADMINISTRATIVE ORGANIZATION

Administrative Staff

Laurnz A. Swartz
Executive Director

Jeffrey A. Willison
Investment Manager

Don A. McCorry
Retirement Administrator

Professional Services

Actuary

Milliman & Robertson
Actuaries
Vienna, VA

Auditor

KPMG Peat Marwick LLP
Certified Public Accountants
Washington, DC

Investment Managers

BEA Associates
New York, NY

Payden & Rygel Investment Counsel
Los Angeles, CA

Barclays Global Investors
San Francisco, CA

Schroder Capital Management
International, Inc.
London, England

Cohen & Steers Capital Management, Inc.
New York, NY

Thomson Horstman & Bryant, Inc.
Saddle Brook, NJ

The Crabbe Huson Group, Inc.
Portland, OR

Robert E. Torray & Co., Inc.
Bethesda, MD

JP Morgan Investment Management, Inc.
New York, NY

Wanger Asset Management, L.P.
Chicago, IL

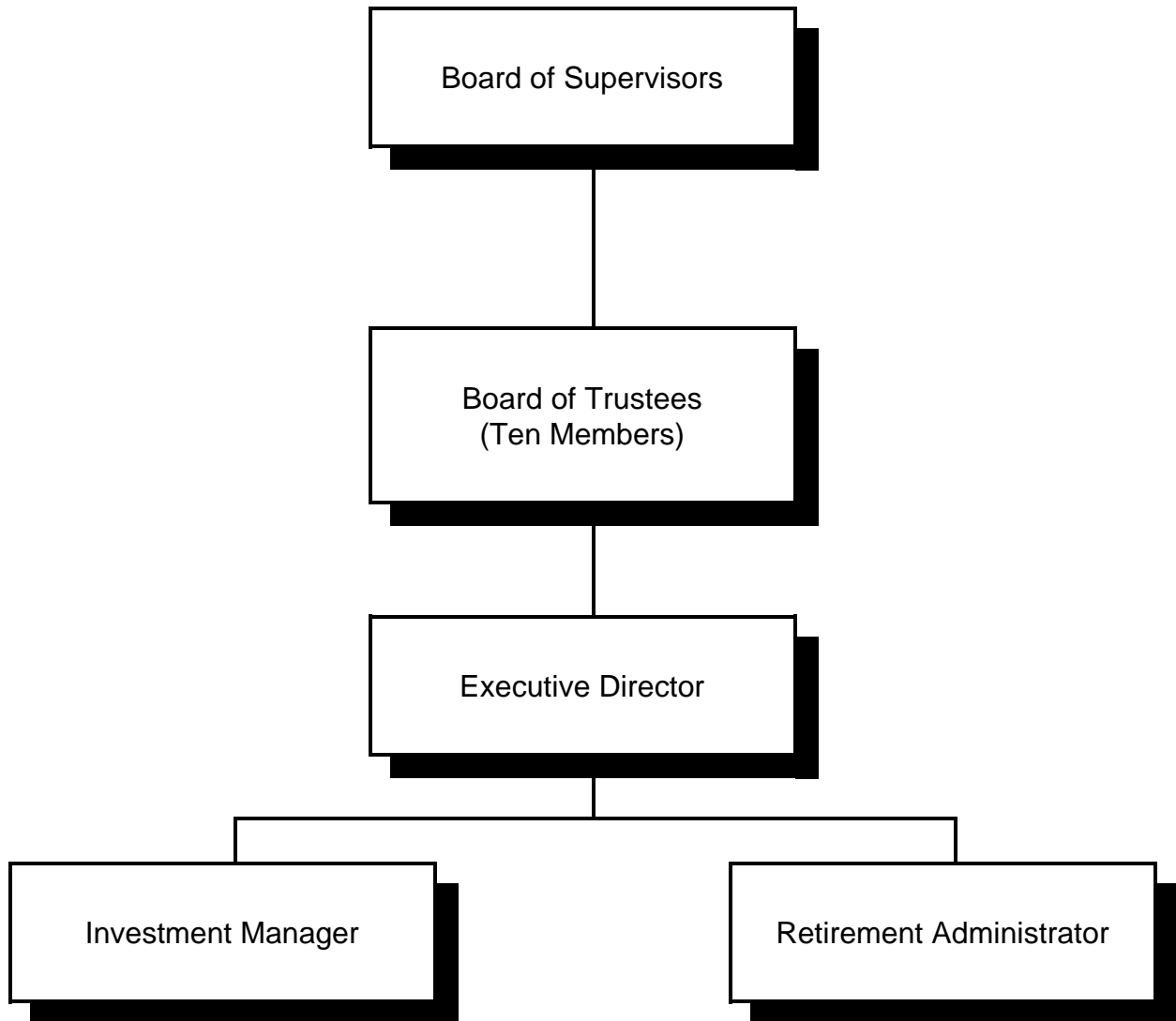
Lazard Asset Management
New York, NY

Custodial Bank

State Street Bank and Trust Company
Boston, MA

INTRODUCTORY SECTION

ORGANIZATIONAL CHART



INTRODUCTORY SECTION

SUMMARY OF PLAN PROVISIONS

Membership in the Fairfax County Supplemental Retirement System includes most County employees working at least 20 hours per week as well as part-time and support staff employees from the Fairfax County Public Schools. The System consists of two Plans, Plan A and Plan B which have slightly different employee contribution rates and slightly different benefits. In all other respects, the plans are identical. The employee has the option to enroll in either plan within 30 days of employment. This choice is irrevocable. Employees who make no election default to retirement Plan A.

The general provisions of the Supplemental Retirement System are as follows:

Plan A

Contribution Rate: 4% of base salary up to the maximum Social Security wage base plus 5.333% of base salary over the wage base.

Benefit: 1.8% of average final compensation (highest consecutive three years) up to the Social Security Breakpoint times creditable service plus 2% of average final compensation which exceeds the Social Security Breakpoint times creditable service. The total benefit is then increased by 3%. The Social Security Breakpoint is an average of Social Security wage bases for the last 35 years before a member reaches age 65.

In addition, if the retiree is under age 62 at the time of normal service retirement, a Pre-62 benefit is payable at the rate of 1% of average final compensation up to the Social Security Breakpoint times creditable service. The total benefit is then increased by 3%.

Plan B

Contribution Rate: 5.333% of base salary.

Benefit: 2% of average final compensation (highest consecutive three years) times creditable service. The total benefit is then increased by 3%.

In addition, if the retiree is under age 62 at the time of normal service retirement, a Pre-62 benefit is payable at the rate of 1% of average final compensation up to the Social Security Breakpoint times creditable service. The total benefit is then increased by 3%.

Both Plans

Normal Retirement: is either age 65 with at least 5 years of service or at least age 50 when the member's age plus creditable service (including sick leave) totals 80 or more.

Early Retirement: is at least age 50 when the member's age plus creditable service total 75 or more. Reduction factors are applied to the basic formula for early retirement and no Pre-62 benefit is payable.

SUMMARY OF PLAN PROVISIONS

(Continued)

INTRODUCTORY SECTION

Deferred Vested Retirement: is available for vested members (vesting is at 5 years of creditable service) who leave their contributions in the System when they terminate. These members are entitled to their normal retirement benefit based on service with the County at age 65 or a reduced benefit earlier when they reach age 50 and age plus years of creditable service equal 75. This benefit is then increased by 3%.

Service-Connected Disability Retirement: is available for members, regardless of their length of service, who become disabled as a result of a job-related illness or injury. Benefits are 66⅔% of their average final compensation.

Ordinary Disability Retirement: is available for vested members who become disabled due to an injury or illness that is not job-related. Benefits are 2% of Average Final Compensation (highest consecutive three years) times creditable service. The total benefit is then increased by 3%.

Death Benefits: Before Retirement — If the member is vested and the spouse is the beneficiary, the spouse may elect to receive 50% of the normal retirement benefit earned as of the date of the member's death. This benefit ceases if the spouse remarries before age 60. If this benefit is not elected, a refund of the member's contributions and interest is payable to the named beneficiary.

After Retirement — Refund of any of the member's contributions and interest not already paid in benefits will be payable to the named beneficiary(ies) unless the member has elected the irrevocable Joint and Last Survivor Option which provides a benefit to the member's spouse for life. At retirement, the member may choose to have his spouse receive 50%, 66⅔%, 75% or 100% of the member's reduced annuity upon the member's death. The member's annuity is reduced by a percentage based on the difference in age between the member and his or her spouse. If the spouse pre-deceases the member, the annuity is restored to what it would have been if this option had not been elected.

Service-Connected Death Benefit — A \$10,000 lump-sum payment is made to the beneficiary if the member's death is due to a job-related illness or injury.

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KPMG Peat Marwick LLP

2001 M Street, N.W.
Washington, DC 20036

Independent Auditors' Report

The Board of Supervisors
County of Fairfax, Virginia

The Board of Trustees
Fairfax County Supplemental Retirement System:

We have audited the financial statements of the Fairfax County Supplemental Retirement System (System), a pension trust fund of the County of Fairfax, Virginia, as of and for the year ended June 30, 1998, as listed in the accompanying table of contents. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As discussed in the notes to the financial statements, the financial statements present only the net assets and changes in net assets of the System and are not intended to present fairly the financial position and results of operations of the County in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the System as of June 30, 1998, and its changes in plan net assets for the year then ended, in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information on pages 21 through 23 is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplementary information on pages 21 and 22 is required by the Governmental Accounting Standards Board. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG Peat Marwick LLP

October 5, 1998

A non U.S. firm of KPMG International

FINANCIAL SECTION

STATEMENT OF PLAN NET ASSETS

as of June 30, 1998

Assets

Equity in County's pooled cash and temporary investments	\$2,156,714
Accrued interest and dividends receivable	6,863,725
Investments, at fair value	
U.S. Government obligations	74,159,324
Asset-backed securities	176,573,798
Municipal bonds	6,062,308
Corporate bonds	159,005,617
Common and preferred stock	815,055,713
Mutual funds	346,468,607
Short-term investments	38,508,524
Cash collateral received under securities lending agreements	<u>115,115,324</u>
Total investments	<u>1,730,949,215</u>
Total assets	1,739,969,654

Liabilities

Payable for collateral received under securities lending agreements	115,115,324
Accounts payable and accrued expenses	<u>1,817,039</u>
Total liabilities	<u>116,932,363</u>

Net assets held in trust for pension benefits (A schedule of funding progress is presented on page 21.)	<u>\$1,623,037,291</u>
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See accompanying notes to financial statements.

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STATEMENT OF CHANGES IN PLAN NET ASSETS

For the Year Ended June 30, 1998

Additions

Contributions	
Employer	\$30,955,140
Plan members	<u>17,996,500</u>
Total contributions	48,951,640
Investment income	
Net appreciation in fair value of investments	186,080,429
Interest	34,640,262
Dividends	22,852,534
Securities lending	7,480,387
Other	<u>29,178</u>
Total investment income	251,082,790
Less investment expense	
Securities lending	7,072,306
Investment fees and other	<u>5,691,616</u>
Total investment expense	<u>12,763,922</u>
Net investment income	<u>238,318,868</u>
Total additions	287,270,508

Deductions

Annuity benefits	39,494,011
Disability benefits	4,342,301
Survivor benefits	1,130,523
Refunds	4,898,119
Administrative expense	<u>586,152</u>
Total deductions	<u>50,451,106</u>

Net increase 236,819,402

Net assets held in trust for pension benefits

July 1, 1997	<u>1,386,217,889</u>
June 30, 1998	<u>\$1,623,037,291</u>

See accompanying notes to financial statements.

FINANCIAL SECTION

NOTES TO THE FINANCIAL STATEMENTS

For the Year Ended June 30, 1998

The Fairfax County Supplemental Retirement System ("System" or "plan") is considered part of the County of Fairfax, Virginia's ("County") financial reporting entity and is included in the County's general purpose financial statements as a pension trust fund. The accompanying financial statements present only the operations of the System in conformity with generally accepted accounting principles. They are not intended to present fairly the financial position and results of operations of the entire County.

A. Summary of Significant Accounting Policies

Basis of Accounting. The System's financial statements have been prepared under the accrual basis of accounting. Member and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due in accordance with the terms of the plan. The cost of administering the plan is paid by the System.

Method Used to Value Investments. Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Asset-backed securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The System records investment purchases and sales as of trade date. These transactions are not finalized until settlement date, which occurs approximately three business days after the trade date. The amounts of trade receivables and payables are not separately disclosed due to immateriality. Cash received as collateral on securities lending transactions and investments made with such cash are reported as assets along with a related liability for collateral received.

Equity in County's pooled cash and temporary investments. The System maintains its cash with the County, which invests cash and allocates interest earned, net of a management fee, on a daily basis to the fund based on the fund's average daily balance of equity in pooled cash. As of June 30, 1998, the bank balance of the County's public deposits was either insured by the Federal Deposit Insurance Corporation or was insured through the State Treasury Board pursuant to the provisions of the Security for Public Deposit Act.

FINANCIAL SECTION

NOTES TO THE FINANCIAL STATEMENTS (Continued)

B. Plan Description and Contribution Information

Membership. At July 1, 1997, the date of the latest actuarial valuation, membership in the System consisted of:

Retirees and beneficiaries receiving benefits	3,157
Terminated plan members entitled to but not yet receiving benefits	510
Active plan members	<u>11,558</u>
Total	<u>15,225</u>

Plan Description. The System is a cost-sharing multiple-employer defined benefit pension plan which only covers employees of the County and its component units. The plan covers full-time and certain part-time County, Public Schools, Economic Development Authority and Fairfax County Redevelopment and Housing Authority employees who are not covered by other County or Commonwealth of Virginia retirement plans. Benefit provisions are established and may be amended by County ordinances. All benefits vest at five years of service. To be eligible for normal retirement, an individual must meet the following criteria: (a) attain the age of 65 with five years of service, or (b) attain the age of 50 with age plus years of service being greater than or equal to 80. The normal retirement benefit is calculated using average final compensation (i.e., the highest 78 consecutive two week pay periods or the highest 36 consecutive monthly pay periods) and years (or partial years) of service at date of termination. The plan provides that unused sick leave credit may be used in the calculation of average final compensation by projecting the final salary during the unused sick leave period. The benefit for early retirement is actuarially reduced and payable at early termination.

Annual cost-of-living adjustments are provided to retirees and beneficiaries equal to the lesser of 4 percent or the percentage increase in the Consumer Price Index for the Washington Metropolitan Area.

Contributions. The contribution requirements of System members are established and may be amended by County ordinances. Members may elect to join Plan A or Plan B. Plan A requires member contributions of 4 percent of compensation up to the Social Security wage base and 5.33 percent of compensation in excess of the wage base. Plan B requires member contributions of 5.33 percent of compensation. The County is required to contribute at an actuarially determined rate; the rate for the year ended June 30, 1998 was 8.12 percent of annual covered payroll.

C. Investments

The authority to establish the System is set forth in Section 51.1-800 *Code of Virginia* (Code). Section 51.1-803 of the Code authorizes the System to purchase investments *with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in*

FINANCIAL SECTION

NOTES TO THE FINANCIAL STATEMENTS

(Continued)

a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with the same aims. Such investments shall be diversified so as to minimize the risk of large losses unless under the circumstances it is clearly prudent not to do so.

As permitted by the Code described above, the System invests in derivative instruments on a limited basis in accordance with Board of Trustees' policy. During the fiscal year, the System invested directly in various derivatives including asset-backed securities, collateralized mortgage obligations (CMOs), forward currency contracts, and floating rate securities. Investment managers are specifically prohibited from purchasing securities on margin or leverage.

The System entered into these investments either to increase earnings or to hedge against potential losses. These investments generally contain market risk resulting from fluctuations in interest and currency rates. The credit risk of these investments results from the creditworthiness of the counterparties to the contracts. An additional credit risk related to the asset-backed securities and CMOs results from the creditworthiness of the related consumers or mortgagees.

In addition, the System has indirect exposure to market and credit risk through its ownership interests in certain mutual funds which hold derivative financial instruments.

At June 30, 1998, investments in derivatives, including related mutual funds, represented 12.7 percent of the total fair value of the System's portfolio. Throughout the fiscal year, investments in derivatives ranged from 5.5 percent to 12.7 percent of the portfolio's fair value.

The System does not have investments (other than U.S. government and U.S. government guaranteed obligations) in any one organization that represent 5 percent or more of net assets available for benefits. All investments, except for the mutual funds, short-term investment fund, and short-term collateral investment pool, are held by an unaffiliated custodian in the name of the System. Investment decisions for these assets are made by the Board of Trustees or investment managers selected by the Board.

Board of Trustees policies permit the System to lend its securities to broker-dealers and other entities (borrowers) for collateral that will be returned for the same securities in the future. The System's custodian is the agent in lending the plan's domestic securities for collateral of 102 percent and international securities for collateral of 105 percent. The custodian receives cash, securities or irrevocable bank letters of credit as collateral. All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in the lending agent's collective collateral investment pool, which at year end has a weighted average maturity of 64 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of securities loans made by other plan entities that invest cash collateral in the investment pool, which the System cannot determine.

The System did not impose any restrictions during the period on the amounts of loans the lending agent made on its behalf, and the agent indemnifies the System by agreeing to purchase replacement securities, or return the cash collateral thereof, in the event a borrower fails to

FINANCIAL SECTION

NOTES TO THE FINANCIAL STATEMENTS

(Continued)

return loaned securities or pay distributions thereon. There were no such failures by any borrower during the fiscal year, nor were there any losses during the period resulting from a default of the borrower or lending agent.

Securities lent for securities, or irrevocable letters of credit collateral are classified in the following schedule of investments according to the category of the collateral received. Securities lent at year-end for cash collateral are unclassified as the cash collateral is invested in a collective collateral investment pool. At year end, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System.

As of June 30, 1998, the market value of securities on loan is \$116,670,792. Cash received as collateral and the related liability of \$115,115,324 as of June 30, 1998 are shown on the Statement of Plan Net Assets. Securities received as collateral are not reported as assets since the System does not have the ability to pledge or sell the collateral securities absent borrower default.

The System's investments are categorized to give an indication of the level of risk assumed by the System at year end. Category 1 includes investments that are insured or registered or for which the securities are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the securities are held by a counterparty's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by a counterparty or its trust department or agent, but not in the System's name. All of the System's investments meet the criteria of Category 1, except investments in mutual funds, a short-term investment fund, a short-term collateral investment pool and those securities on loan for which the cash collateral is invested in the collateral investment pool. These investments by their nature are not required to be categorized.

FINANCIAL SECTION

NOTES TO THE FINANCIAL STATEMENTS

(Continued)

A schedule of investments as of June 30, 1998 follows:

Categorized investments

Short-term investments	
Corporate bonds	\$5,897,049
Asset-backed securities	11,456,964
U.S. Government bonds	<u>17,894,993</u>
Total short-term investments	35,249,006
U.S. Government obligations	
Not on securities loan	29,683,961
On securities loan for securities collateral	4,251,358
Asset-backed securities	176,573,798
Municipal bonds	6,062,308
Corporate bonds	154,257,907
Common and preferred stock	
Not on securities loan	747,607,994
On securities loan for letter of credit collateral	<u>2,019,793</u>
Total categorized investments	1,155,706,125

Uncategorized investments

Short-term investment in mutual fund	3,259,518
Mutual fund	346,468,607
Securities lending short-term collateral investment pool	115,115,324
Investments held by broker dealers under securities loans with cash collateral:	
U.S. Government obligations	40,224,005
Corporate bonds	4,747,710
Common and preferred stock	<u>65,427,926</u>
Total uncategorized investments	575,243,090

Total investments	<u>\$1,730,949,215</u>
--------------------------	-------------------------------

D. Income Taxes

The Internal Revenue Service issued a determination letter on March 29, 1995, which stated that the System and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and therefore are exempt from federal income taxes. In the opinion of the plan administrator, the System and its underlying trust have operated within the terms of the System and are qualified under the applicable provisions of the Internal Revenue Code.

FINANCIAL SECTION

REQUIRED SUPPLEMENTARY INFORMATION

Six-year historical trend information about the System is presented herewith as required supplementary information. This information is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating assets to pay benefits when due, and make comparisons with other public employee retirement systems.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/92	\$ 632,639,417	\$684,683,455	\$ 52,044,038	92.40%	\$336,393,689	15.47%
7/1/93	723,770,726	765,420,671	41,649,945	94.56%	327,921,102	12.70%
7/1/94	796,157,626	837,636,088	41,478,462	95.05%	325,682,644	12.74%
7/1/95	889,160,271	930,819,185	41,658,914	95.52%	348,403,016	11.96%
7/1/96	1,116,662,361	1,142,455,206	25,792,845	97.74%	363,290,025	7.10%
7/1/97	1,231,382,638	1,241,813,772	10,431,134	99.16%	365,583,822	2.85%

Analysis of the dollar amounts of plan net assets, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing plan net assets as a percentage of the actuarial accrued liability provides one indication of the System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in the unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the system's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Annual Required Contribution	Percentage Contributed
1993	\$ 29,152,186	100%
1994	25,370,678	100%
1995	26,896,714	100%
1996	28,663,583	100%
1997	29,941,315	100%
1998	30,955,140	100%

FINANCIAL SECTION

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	July 1, 1997
Actuarial cost method	Entry age
Amortization method	Level percent closed
Remaining amortization period	Weighted average of 15.0 years
Asset valuation method	3-Year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.5%
Projected salary increases*	4.3%-5.4%
*Includes inflation at	4.0%
Cost-of-living adjustments	3.0%

The actuarial assumptions used have been recommended by the actuary and adopted by the System's Board of Trustees based on the most recent review of the System's experience, completed in 1996.

The rate of employer contributions to the plan is composed of the normal cost, amortization of the unfunded actuarial liability and an allowance for administrative expenses. The normal cost is a level percent of pay cost which, along with the member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability. The unfunded actuarial liability as of the valuation date is being amortized over 15 years. The allowance for administrative expenses is based upon the plan's actual administrative expenses.

Investment gains have resulted in a decrease in the unfunded actuarial liability as of valuation date. The result is an employer contribution rate of 6.04 percent for the fiscal year ending June 30, 1999, a decrease of 2.08 percent from the fiscal year 1998 rate of 8.12 percent.

FINANCIAL SECTION

SUPPORTING SCHEDULE

SCHEDULE OF INVESTMENT EXPENSE

(For the year ended June 30, 1998)

Securities lending expense	
Rebates paid to borrowers under securities lending agreements	\$6,832,798
Fees paid to securities lending agent	<u>239,508</u>
Total securities lending expense	7,072,306
Investment manger fees	
Equity mangers	4,028,990
BEA Associates	
Cohen & Steers Capital Managers	
The Crabbe Huson Group	
Lazard Asset Management	
Morgan Stanley Asset Management	
Robert E. Torray & Co.	
Thomson, Horstmann & Bryant	
Fixed income managers	<u>1,097,288</u>
BEA Associates	
JP Morgan Investment Management	
Payden & Rygel Investment Counsel	
Total investment management fees	5,126,278
Custody fees	236,262
Fees paid for investment software	36,000
Allocated administrative expense	<u>293,076</u>
Total investment expense	<u>\$12,763,922</u>

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INVESTMENT SECTION

ASSET ALLOCATION BY CATEGORY AND INVESTMENT MANAGER

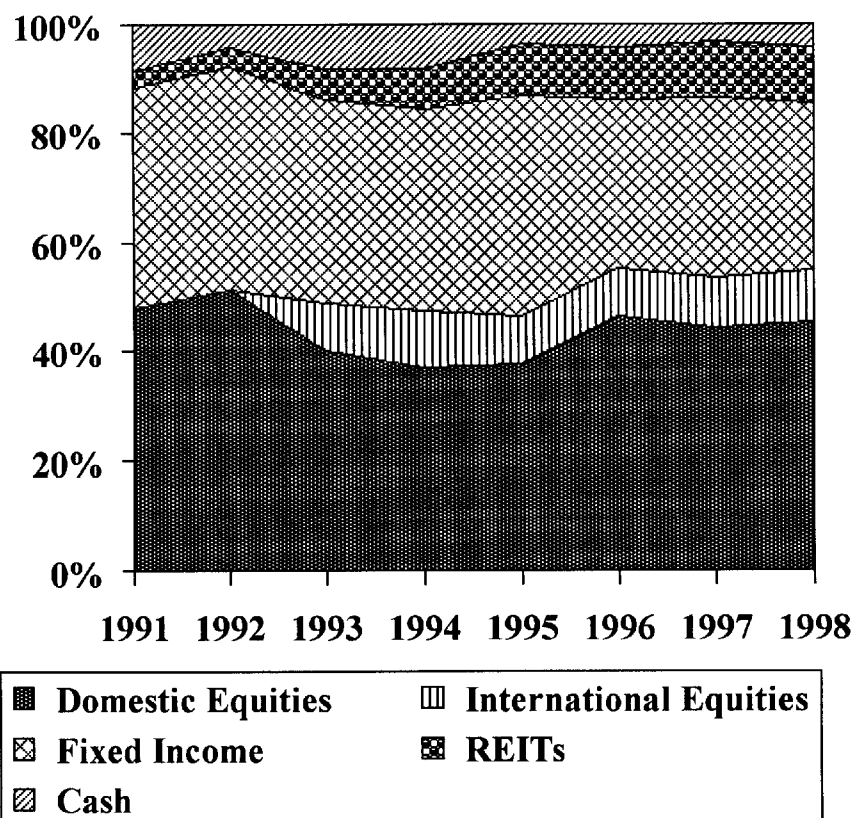
Asset Class Manager	Investment Style	Total Assets	% of Total Assets
Domestic Equities			
BEA Associates	Active Large Cap Core	\$ 157,192,547	9.7%
Robert E. Torray	Active Large Cap Value	180,382,825	11.1%
Lazard Asset Mgt.	Active Large Cap Value	133,838,988	8.2%
Barclays Global*	Passive S&P/BARRA Growth	170,446,487	10.5%
Acorn Fund*	Active Small Cap Core	64,685,819	4.0%
Crabbe Huson	Active Small Cap Value	49,745,214	3.0%
Thomson, Horstmann & Bryant	Active Small Cap Core	35,656,459	2.2%
International Equities			
Lazard Asset Mgt.	Active EAFE	131,525,060	8.1%
Schroder Capital*	Active Emerging Markets	15,856,443	1.0%
Real Estate			
Cohen & Steers	Active Equity REITs	161,586,740	9.9%
Global Fixed Income			
BEA Associates	Active Core	118,328,349	7.3%
J.P. Morgan	Active Core	217,083,205	13.4%
Payden & Rygel	Active Core	183,917,236	11.3%
P&R Tailored STIF	Active Short Term	2,443,521	0.2%
Cash Held At Treasurer	Active Short Term	2,165,437	0.1%
Total Assets**		\$ 1,624,854,330	100.0%

* Pooled Funds

** Without Cash Collateral

INVESTMENT SECTION

Asset Allocation 1991 - 1998



INVESTMENT SECTION

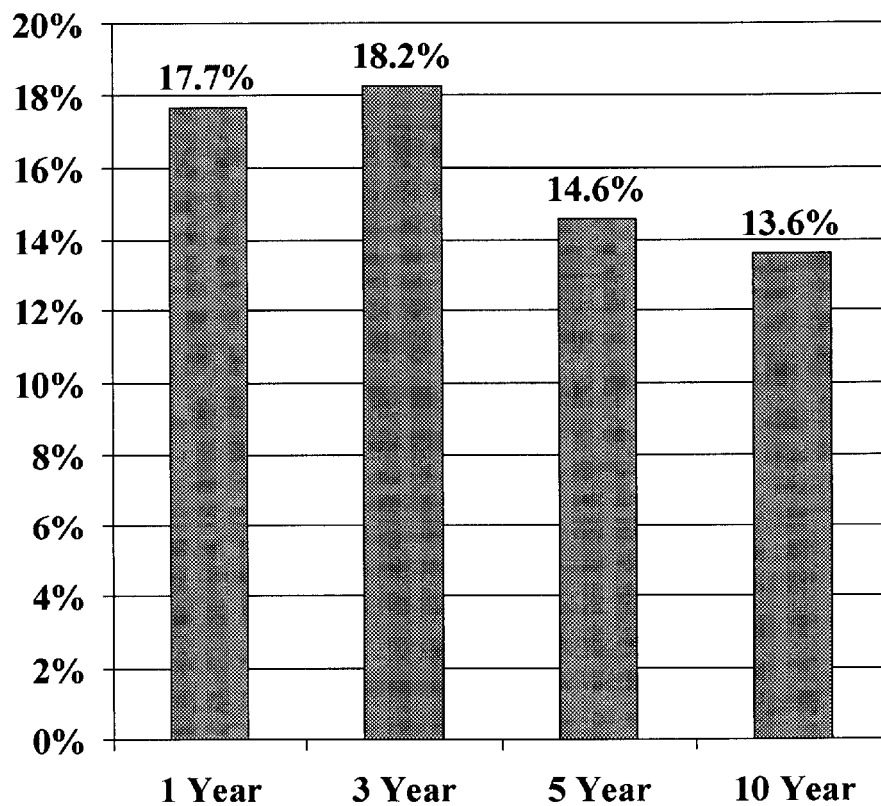
LIST OF LARGEST ASSETS HELD (June 30, 1998)

Fifteen Largest Equity Holdings	Shares	Market Value
AT&T Corporation	262,100	\$14,972,463
IBM	107,100	12,296,419
Vornado Realty Trust	290,300	11,521,281
SLM Holding Corporation	210,000	10,290,000
Travelers Group Inc.	164,915	9,997,972
Starwood Hotels & Resorts Trust	200,200	9,672,163
Electronic Data Systems Corporation	230,200	9,193,613
Bristol-Myers Squibb Company	75,200	8,643,300
Microsoft Corporation	76,800	8,323,200
Loral Space & Communications	290,700	8,212,275
Mack-Cali Realty Corporation	238,100	8,184,688
Crescent Real Estate Equities	232,600	7,821,175
E.I. du Pont de Nemours & Co.	102,200	7,633,063
American Home Products Corporation	142,600	7,379,550
Rouse Company	232,800	7,318,650

Fifteen Largest Fixed Income Holdings	Interest Rate	Maturity Date	Par Value	Market Value
United States Treasury Bonds	6.750%	Aug. 2026	\$13,805,000	\$15,804,516
Government National Mortgage Association Pool 353794	8.000%	Aug. 2027	10,430,914	10,809,034
AMR Corporation, Delaware	9.000%	Aug. 2012	9,000,000	10,618,200
Time Warner Entertainment Company, LP	8.375%	Mar. 2023	9,000,000	10,541,790
Apache Corporation Notes	6.500%	Dec. 2007	9,000,000	9,001,890
United States Treasury Notes	5.500%	Feb. 2000	9,000,000	8,997,210
Federal National Mortgage Association 30-Year July TBA	6.500%	Jul. 2028	8,860,000	8,823,940
United States Treasury Notes	7.750%	Nov. 1999	8,500,000	8,753,640
First USA Credit Card Master Trust	5.995%	Aug. 2003	8,500,000	8,566,130
United States Treasury Notes	6.250%	Aug. 2000	8,000,000	8,117,520
United States Treasury Security Strips	0.000%	Aug. 2006	12,500,000	7,983,750
Chase Manhattan Auto Owner	6.250%	Nov. 2000	7,700,000	7,726,411
Citibank Credit Card Master Trust	6.550%	Feb. 2004	7,500,000	7,638,225
IMC Home Equity Loan Trust	6.015%	Jan. 2028	7,304,645	7,298,940
MBNA Master Credit Card Trust II	6.600%	Nov. 2004	7,000,000	7,170,590

INVESTMENT SECTION

TOTAL FUND AVERAGE RETURN ON INVESTMENTS





MILLIMAN & ROBERTSON, INC.

Actuaries & Consultants

Internationally WOODROW MILLIMAN

Suite 1000, 8000 Towers Crescent Drive, Vienna, VA 22182-2700
Telephone: 703/917-0143
Fax: 703/827-9266

October 2, 1998

Board of Trustees
Fairfax County Supplemental
Retirement System
10680 Main Street - Suite 280
Fairfax, VA 22030-3805

Dear Members of the Board:

At your request, we have performed our annual actuarial valuation of the Fairfax County Supplemental Retirement System as of July 1, 1997. The results of the valuation are contained in this report.

Funding Objective

The funding objective of the System is to establish contribution rates which, over time, will remain level as a percent of payroll. In order to achieve this, a contribution rate has been determined which will provide for current cost (i.e., normal cost expressed as a level percent of payroll) plus level percent of payroll amortizations of each layer of the unfunded liability over a 15 year period. This funding objective is currently being realized.

Due to large investment gains in recent years, the plan's funding had reached the point where a large amortization payment was due to be paid on a rather small unfunded liability. In order to prevent overpayment we recommended that the Board roll-up the remaining 15 year basis which were being amortized over periods ranging from 4 to 15 years and re-establish the July 1, 1997 unfunded liability over a new 15 year period. This resulted in a reduction in the contribution rate otherwise payable of 1.92% of payroll.

Assumptions

The actuarial assumptions used in this valuation have been recommended by the actuary and adopted by the Board of Trustees based upon the most recent review of the System's experience completed in 1996. We believe the assumptions used, in the aggregate, represent our best estimate of future experience of the plan.

The assumptions and methods used in performing this valuation meet the parameters set for disclosure presented in the financial section by Government Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

Reliance on Others

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found the data to be reasonably consistent and comparable with data used in the prior valuation.

Albany, Atlanta, Boston, Chicago, Dallas, Denver, Hartford, Houston, Indianapolis, Irvine, Los Angeles, Milwaukee, Minneapolis, New York, Omaha, Philadelphia, Phoenix, Portland, ME, Portland, OR, St. Louis, Salt Lake City, San Diego, San Francisco, Seattle, Tampa, Washington, D.C., Bermuda, Tokyo
WOODROW MILLIMAN Member Firms in Principal Cities Worldwide

ACTUARIAL SECTION

Board of Trustees Fairfax County
Supplemental Retirement System
October 2, 1998
Page 2

Supporting Schedules

We were responsible for all supporting schedules to be found in the Actuarial Section.

We were responsible for all years of the Schedule of Funding Progress, Schedule of Employer Contributions and Notes to Trend Data shown in the Financial Section.

Compliance with Code of Virginia §51.1-800

Code of Virginia §51.1-800 requires that the benefits provided a retiree at age 65 from a local retirement system equal or exceed two-thirds of the allowance to which the employee would be entitled under the provisions of the Virginia Retirement System (VRS). The Board of Trustees of the VRS is to determine whether a local system satisfies this condition, taking into account differences in member contributions between the local system and the VRS.

Although there is no formal procedure for making this comparison, we have compared the least valuable accrual rate under the Supplemental Plan to the most valuable accrual rate under the VRS, making adjustments for the fact that employee contributions are required in excess of the VRS 5% rate. The employer provided accrual rates do exceed $\frac{2}{3}$ of the employer provided accrual rates under the VRS plan.

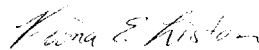
I certify that, to the best of my knowledge and understanding, the Fairfax County Supplemental Retirement System satisfies the requirements of the Code of Virginia §51.1-800.

Certification

On the basis of the foregoing, we certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Guides to Professional Conduct, Amplifying Opinions, and supporting Recommendations and Interpretations of the American Academy of Actuaries.

Respectfully submitted,

MILLIMAN & ROBERTSON, INC.



Fiona E. Liston, F.S.A.
Consulting Actuary

MILLIMAN & ROBERTSON, INC.

ACTUARIAL SECTION

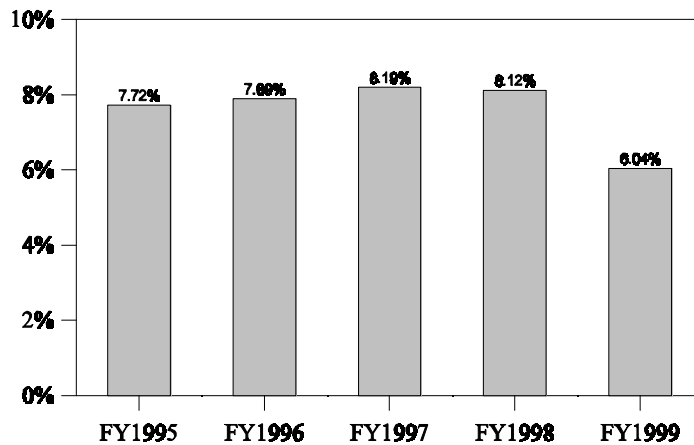
SUMMARY OF VALUATION RESULTS

(1) Overview

This report presents the results of our July 1, 1997 actuarial valuation of the Fairfax County Supplemental Retirement System.

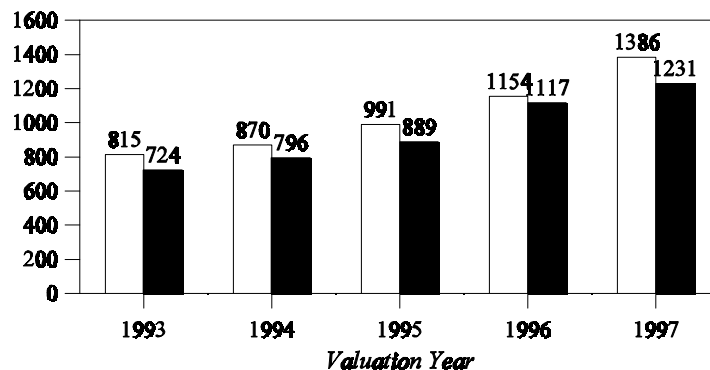
The major findings of the valuation are summarized in the following charts.

*Employer Contribution Rates
(As a % of Payroll)*



There was a decrease in the employer contribution rate over the past year due primarily to a re-amortization of the unfunded actuarial liability.

*System Assets
(In Millions)*



The System's assets have grown by about 14% per year since 1993. The \$155 million difference between market and actuarial values provide a cushion against future possible adverse performance.

□ Market ■ Actuarial

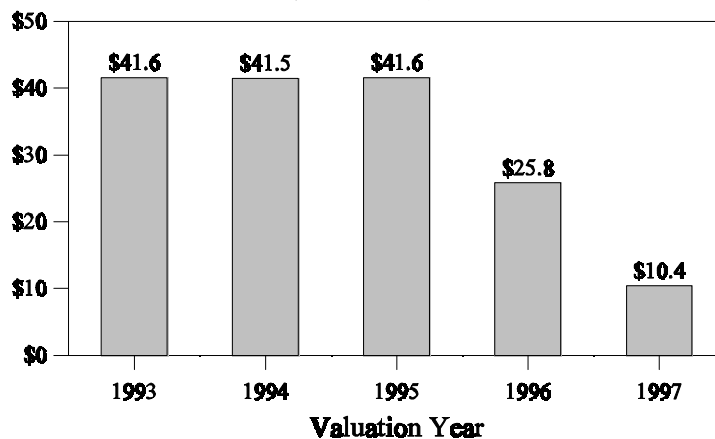
ACTUARIAL SECTION

SUMMARY OF VALUATION RESULTS

(Continued)

Unfunded Actuarial Liability

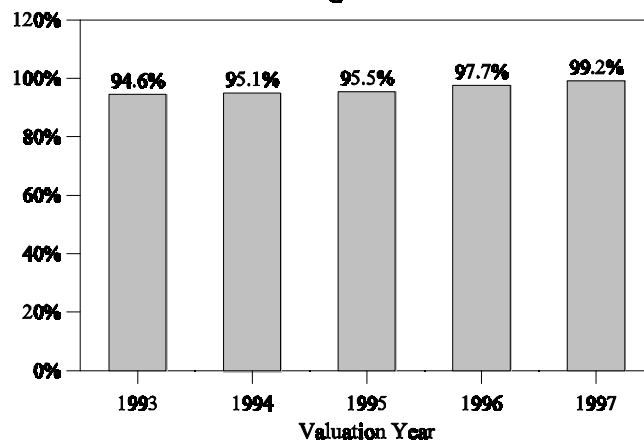
(In Millions)



The unfunded actuarial liability decreased over the past year. This was due to asset gains.

The ratio of actuarial assets to the actuarial accrued liability increased over the past year. This is the GASB #25 measure of funding progress which replaces the PBO formerly reported.

Funding Ratio



(2) Summary of Results

The table on the next page compares the principal results from the 1996 and 1997 valuations.

ACTUARIAL SECTION

SUMMARY OF VALUATION RESULTS

(Continued)

	<u>July 1, 1996</u>	<u>July 1, 1997</u>	<u>Percent Change</u>
1. <u>Participant Data</u>			
Number of:			
Active Members	12,383	11,558	- 6.7%
Retired Members and Beneficiaries	2,458	2,644	+ 7.6%
Disabled Members	483	513	+ 6.2%
Vested Former Members	298	510	+ 71.1%
Annual Salaries of Active Members	\$ 364,482,863	\$ 361,807,964	- 0.7%
Annual Benefits for Retired and Disabled Members, and Beneficiaries (Excluding Supplemental Benefits)	\$ 34,161,544	\$ 37,994,548	+ 11.2%
2. <u>Assets and Liabilities</u>			
Total Actuarial Liability	\$1,142,455,206	\$1,241,813,772	+ 8.7%
Assets for Cost Purposes	\$1,116,662,361	\$1,231,382,638	+ 10.3%
Unfunded Actuarial Liability	\$ 25,792,845	\$ 10,431,134	- 59.6%
3. <u>Contribution Results (as percent of payroll)</u>	<u>1996</u>	<u>1997</u>	
Employer Normal Cost Contribution	5.50%	5.50%	
Unfunded Actuarial Liability Contribution	2.32%	0.24%	
Administrative Expenses	<u>0.30%</u>	<u>0.30%</u>	
Total Contribution	8.12%	6.04%	

ACTUARIAL SECTION

SUMMARY OF VALUATION RESULTS

(Continued)

(3) *Valuation Highlights*

1. System Assets

As of July 1, 1997, the System had assets at fair value of \$1.4 billion, as compared to \$1.2 billion as of July 1, 1996. The increase of \$232 million was attributable to the following:

- an increase of \$47 million due to employer and member contributions;
- a decrease of \$46 million due to payment of System benefits and expenses;
- an increase of \$231 million due to System investment experience (realized and unrealized).

When measured on an actuarial basis for contribution purposes (in order to smooth the peaks and valleys of market fluctuations), System assets were \$1.2 billion as of July 1, 1997, up from \$1.1 billion as of July 1, 1996. Last year we changed the asset valuation method to a method which treats all types of returns (realized, unrealized and cash) in an equal manner. At the point of transition we wrote-up the actuarial value of assets by 75% of the difference between the current method actuarial value and fair value in an attempt to keep the employer contribution rate level. This year, the actuarial value of assets was calculated using the revised method, as if it had been in place since 1980. That is, we recognized one third of the gains between this year's fair value of assets and the actuarial value that would have been used last year, if the smoothing method had always been in place. Overall, the rate of return on System assets was 20.1% on a fair value basis, and 10.2% on an actuarial basis..

2. System Liabilities

Two types of liabilities are presented in this report; actuarial liabilities and the liability for benefits accrued to date. Actuarial liabilities are developed and used for ongoing funding purposes and include a portion of future anticipated pay increases and service credit. This measure is also used as the measurement of actuarial accrued liability required to be disclosed under Governmental Accounting Standards Board Statement No. 25.

The liability for benefits accrued to date measures the present value of all future System benefits based on service to date. In this report, we present a measure of the liability for benefits accrued which conforms with Statement No. 35 of the Financial Accounting Standards Board.

As of July 1, 1997, the System actuarial liabilities are \$1.2 billion, as compared to \$1.1 billion as of July 1, 1996. When measured against System assets (actuarial value) of \$1.2 billion, there are System unfunded actuarial liabilities of \$10 million. This compares to \$26 million of unfunded actuarial liabilities as of July 1, 1996.

SUMMARY OF VALUATION RESULTS

(Continued)

ACTUARIAL SECTION

Viewed another way, the ratio of assets to actuarial liabilities increased from 97.7% (July 1, 1996) to 99.2% (July 1, 1997).

With respect to the liabilities for benefits accrued as of the valuation date, this valuation shows a liability under FASB rules of \$898.5 million as compared to \$816.4 million as of July 1, 1996.

Since these liabilities are based upon a current "snapshot" of members' pay and service, the common approach is to compare this liability with the fair (i.e., current) value of System assets. This comparison as of July 1, 1997 shows that the ratio of System assets (fair value) to liabilities accrued to date under FASB Statement 35 has increased from 141.3% to 154.3%.

3. System Contributions

Contributions to the System include a "normal cost contribution" which is to cover the portion of projected liabilities on account of service of members during the year following the valuation date.

In addition, an unfunded actuarial liability contribution is made which, together with assets on hand, will fund the portion of projected liabilities on account of service rendered prior to the valuation date. Finally, a provision for System administrative expenses is made by adding 0.30% of member payroll to the total contribution.

The employer normal cost contribution is 5.50% of payroll. The current unfunded actuarial liability rate is 0.24% of payroll. Together with the administrative expense rate, this results in a total employer contribution rate from the July 1, 1997 valuation, of 6.04% of payroll compared with a July 1, 1996 valuation rate of 8.12% of payroll.

The decrease in the employer contribution rate of 2.08% of payroll is attributable to the following:

Employer contribution rate	
July 1, 1996 valuation; fiscal year 1998	8.12%
Decrease due to investment gains	(0.69)
Increase due to liability losses	0.53
Decrease due to "fresh start" amortization	<u>(1.92)</u>
Employer contribution rate	
July 1, 1997 valuation; fiscal year 1999	6.04%

ACTUARIAL SECTION

SUMMARY OF VALUATION RESULTS

(Continued)

(4) Membership

The total active membership of the Supplemental System decreased from 12,383 as of July 1, 1996, to 11,558 as of July 1, 1997. With respect to inactive members, the number of retired members and their beneficiaries has increased from 2,458 as of July 1, 1996, to 2,644 as of July 1, 1997. The number of disabled members receiving benefits has increased from 483 to 513, and the number of former members with vested rights has increased from 298 to 510. In total, the membership of the System, both active and inactive, has decreased from 15,622 members as of July 1, 1996, to 15,225 members as of July 1, 1997.

ACTUARIAL SECTION

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

(A) *Funding Method*

The System uses the aggregate accrual modification of the entry age normal method with projection to determine costs. Under this funding method, a total contribution rate is determined which consists of three elements, the normal cost rate, the unfunded actuarial liability rate and the administrative expense rate.

The normal cost rate is a level percent of pay cost which, along with the member contributions, will pay for each member's projected benefits at retirement. This level percent is calculated at entry age for each individual and a weighted average is used for the group. The level percent developed is called the normal cost rate and the product of that rate and payroll is the normal cost. Effective with the 1995 valuation, the normal cost rate was frozen until there is another major plan amendment or a significant change in actuarial assumptions.

In addition to contributions required to meet the System's normal cost, contributions will be required to fund the System's unfunded actuarial liability. Actuarial liability is defined as the present value of future benefits less the present value of future normal costs. The unfunded actuarial liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.

The unfunded actuarial liability rate is the level percent of member payroll which, when applied to each year's payroll is sufficient to amortize the July 1, 1997 unfunded actuarial liability in 15 years, and each subsequent year's gains, losses or plan amendments over 15 years.

An assumed expense rate of 0.30% of payroll is added to cover the System's administrative expenses.

(B) *Asset Valuation Method*

The fair value representing the value for which assets could be sold on a particular day, is not necessarily an appropriate value for the purpose of setting the contribution rates for the System. This is because funding will take place over a long period into the future during which time fair values can be expected to fluctuate widely. If fair values were used to develop contribution rates, the resulting contributions would also vary widely.

In order to produce a stable pattern of contribution rates, fair values are adjusted so that some of the volatility is removed. This adjusted value is determined by using a three-year moving average. Under this method, the actuarial value of the

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

(Continued)

assets is a weighted average between the expected value, assuming the actuarially

ACTUARIAL SECTION

assumed investment return (8½% through 7/1/96 and 7½% thereafter) was achieved, and the actual fair value. The calculation is weighted **a** to the actual fair value and **b** to the expected value. This is mathematically equivalent to recognizing 100% of the actuarial assumed investment return, of contributions and payments each year and **a** of the difference between that expected value and the market value.

(C) Actuarial Assumptions

The assumptions used for the actuarial valuation were recommended by the actuary and adopted by the Board of Trustees based on periodic analysis of the System's experience. Differences between assumed and actual experience (actuarial gains and losses) are part of the unfunded actuarial liabilities. The following significant assumptions were used in the actuarial valuation as of June 30, 1997:

1. a rate of return on investments of 7½% compounded annually (adopted July 1, 1996, the prior rate was 8½%);
2. projected salary increases of 4% compounded annually, attributable to inflation (adopted July 1, 1996, the prior rate was 5%);
3. additional projected salary increases ranging from 0.3% to 1.4% per year, attributable to merit and seniority (adopted July 1, 1996, the prior range was from 0.51% to 2.77% per year);
4. post retirement benefit increases of 3% compounded annually (adopted July 1, 1996, the prior rate was 4%);
5. rates of mortality, termination of service, disablement, and retirement are based on actual experience;
6. aggregate active member payroll is assumed to increase by 4% annually (adopted July 1, 1996, the prior rate was 6%).

A detailed listing of all actuarial assumption follows:

ACTUARIAL SECTION

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

(Continued)

Long Term Assumptions Used to Determine System Costs and Liabilities

1. DEMOGRAPHIC ASSUMPTIONS

a. Mortality: 1994 Uninsured Pensioners Mortality Table

*Annual Deaths Per 1000 Members**

<u>Age</u>	<u>Male Deaths</u>	<u>Female Deaths</u>	<u>Age</u>	<u>Male Deaths</u>	<u>Female Deaths</u>
20	1	0	65	16	9
25	1	0	70	26	15
30	1	0	75	40	24
35	1	1	80	67	42
40	1	1	85	105	73
45	2	1	90	164	125
50	3	2	95	251	200
55	5	2	100	341	297
60	9	5	105	441	415

* 5% of deaths are assumed to be service-connected.

b. Termination of Employment (Prior to Normal Retirement Eligibility)

Annual Terminations per 1000 Members - Male

Years of Employment with County

<u>Age</u>	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	150	150	150	147	116	68
25	150	150	150	127	100	59
30	150	150	150	104	81	48
35	150	150	150	88	69	41
40	150	150	150	76	59	35
45	150	150	150	66	52	31
50	150	150	150	59	46	28
55	150	150	150	53	42	24

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL SECTION

(Continued)

Annual Terminations per 1000 Members - Female

Years of Employment with County

<u>Age</u>	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	200	200	200	150	161	110
25	200	200	200	150	146	100
30	200	200	200	150	124	85
35	200	200	200	150	104	71
40	200	200	200	150	85	58
45	200	200	200	150	71	49
50	200	200	200	150	60	41
55	200	200	200	150	49	33

It is assumed that members who terminate before age 45 with age plus service equal 60 elect to receive a refund of contributions instead of vested benefits.

c. Disability

*Annual Disabilities per 10,000 Members**

Annual Deaths Per 1000 Disabled Members

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
25	6	5	45	43	24
30	6	5	50	48	28
35	6	5	55	53	33
40	10	8	60	58	38
45	28	22	65	64	44
50	52	42	70	73	51
55	80	64	75	89	63
60	80	64	80	107	80

* 30% of disabilities are assumed to be service-connected. Of these, 5% are assumed to receive social Security benefits and 31% are assumed to receive Workers' Compensation benefits.

ACTUARIAL SECTION

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

(Continued)

d. Retirement:

Annual Retirements per 1,000 Eligible Members (Male and Female)

Who are Eligible for Unreduced Benefits

(age 65 with 5 years of service or age 50 with age plus service equal to at least 80)

<u>Age</u>	<u>First Year</u>	<u>Thereafter</u>	<u>Age</u>	<u>First Year</u>	<u>Thereafter</u>
50	250	N/A			
51	250	150	61	250	150
52	250	150	62	250	150
53	250	150	63	250	150
54	250	150	64	250	150
55	250	150	65	250	400
56	250	150	66	250	250
57	250	150	67	250	250
58	250	150	68	250	250
59	250	150	69	250	250
60	250	150	70	1000	1000

e. Family Composition

For purposes of valuing the pre-retirement death benefit, an assumption is made that 80% of employees are married at death while active and that the female spouse is 3 years younger than the male spouse.

f. Sick Leave Credit

Retirees, deferred vested terminations, and deceased members are assumed to receive an additional 1.5% of service credit due to sick leave.

2. ECONOMIC ASSUMPTIONS

a. Investment Return: 7.5% compound per annum

b. Cost-of-Living Benefit Increase: 3.0% compound per annum (based on a CPI increase of 4.0%).

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

(Continued)

ACTUARIAL SECTION

c. Across-the-Board Increase in County Salaries: 4.0% compound per annum.

d. Salary Increases:

<u>Age</u>	<u>Merit/Seniority Increase</u>	<u>Across-the- Board Increase</u>	<u>Total Annual Salary Increase</u>
25	1.4%	4.0%	5.4%
30	1.2	4.0	5.2
35	1.0	4.0	5.0
40	0.8	4.0	4.8
45	0.6	4.0	4.6
50	0.4	4.0	4.4
55	0.3	4.0	4.3

e. Total Payroll increases (for amortization): 4.0% compound per annum

f. Administrative Expenses: 0.3% of payroll.

3. *CHANGES SINCE LAST VALUATION*

None.

ACTUARIAL SECTION

ANALYSIS OF FINANCIAL EXPERIENCE

Gains and Losses in Accrued Liability During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

<u>Type of Activity</u>	<u>Gain (or Loss) for Year ending June 30,</u>			
	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Investment Income	\$ 3,304,628	\$17,728,036	\$35,237,149	\$30,221,622
Combined liability Experience	<u>(5,135,516)</u>	<u>5,341,444</u>	<u>(9,719,758)</u>	<u>23,227,368</u>
Gain (or Loss) During Year from Financial Experience	(\$1,830,888)	\$23,069,480	\$25,517,391	\$ 6,994,236
Non-Recurring Items	<u>(\$4,707,556)</u>	<u>(25,547,130)</u>	<u>(58,682,748)</u>	<u>0</u>
Composite Gain (or Loss) During Year	(\$6,538,444)	(\$2,477,650)	(\$33,165,357)	\$ 6,994,236

SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

<u>Year Ended June 30,</u>	<u>Added to Rolls</u>		<u>Removed From Roll</u>		<u>On Rolls @ Yr. End</u>		<u>% Increase Allowance</u>	<u>Average Allowance</u>
	<u>No.</u>	<u>Annual Allowance</u>	<u>No.</u>	<u>Annual Allowance</u>	<u>No.</u>	<u>Annual Allowance</u>		
1994					2,762	30,303,910		10,972
1995	228	5,072,971	202	1,681,392	2,788	33,695,489	11.19%	12,086
1996	253	5,225,766	100	811,484	2,941	38,109,771	13.10%	12,958
1997	302	5,683,056	86	1,210,797	3,157	42,582,030	11.74%	13,488

ACTUARIAL SECTION

SOLVENCY TEST

Valuation Date	<u>Aggregate Accrued Liabilities For</u>			Reported Assets	<u>Portion of Accrued Liabilities Covered by Reported Assets</u>		
	(1) Active Member Contributions	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members, (Employer Financial Portion)		(1)	(2)	(3)
7/1/92	101,486,808	254,297,365	328,899,283	632,639,417	100%	100%	84%
7/1/93	114,210,775	287,473,024	363,736,872	723,770,726	100%	100%	89%
7/1/94	133,659,880	322,841,833	381,134,375	796,157,626	100%	100%	89%
7/1/95	135,396,722	354,637,934	440,784,520	889,160,271	100%	100%	91%
7/1/96	146,428,975	410,683,886	585,342,345	1,116,662,361	100%	100%	96%
7/1/97	156,795,828	475,446,920	609,571,024	1,231,382,638	100%	100%	98%

STATISTICAL SECTION

SCHEDULE OF ADDITIONS BY SOURCE AND DEDUCTIONS BY TYPE

ADDITIONS

<u>Fiscal Year</u>	<u>Plan Member Contributions</u>	<u>Employer Contributions</u>	<u>Employer Contributions % of Covered Payroll</u>	<u>Net Investment Income</u>	<u>Total Revenues</u>
1993	\$15,223,146	\$29,152,186	8.89%	\$114,399,411 ¹	\$158,774,743
1994	15,439,726	25,370,678	7.79%	40,160,353 ¹	80,970,757
1995	16,254,466	26,896,714	7.72%	113,984,974 ¹	157,136,154
1996	16,906,872	28,663,583	7.89%	158,114,510	203,684,965
1997	17,154,504	29,941,315	8.19%	231,573,698	278,669,517
1998	17,996,500	30,955,140	8.12%	238,318,868	287,270,508

DEDUCTIONS

<u>Fiscal Year</u>	<u>Benefit Payments</u>	<u>Refunds of Contributions</u>	<u>Administrative Expenses</u>	<u>Total Expenses</u>
1993	\$24,327,396	\$3,257,092	\$725,996 ²	\$28,310,484
1994	28,046,607	4,536,420	800,199 ²	33,383,226
1995	31,190,874	3,720,333	865,473 ²	35,776,680
1996	36,164,688	4,113,973	585,274	40,863,935
1997	40,734,826	5,021,777	617,310	46,373,913
1998	44,966,835	4,898,119	586,152	50,451,106

¹ The net investment income for 1993-95 has been restated from amounts previously reported to recognize investment expenses and the change in unrealized gain occurring each year.

² Administrative expenses for 1993-95 are net of an expense allocation to investment expense. Investment expense has been deducted in the computation of Net Investment Income.

STATISTICAL SECTION

SCHEDULE OF BENEFIT PAYMENTS BY TYPE

<u>Fiscal Year Ended June 30,</u>	<u>Annuity</u>	<u>Service- Connected Disability</u>	<u>Ordinary</u>	<u>Survivor</u>	<u>Total</u>
1993	\$20,647,662	\$1,429,526	\$1,612,475	\$ 637,730	\$24,327,393
1994	24,010,199	1,650,126	1,690,415	695,867	28,046,607
1995	26,913,844	1,771,305	1,738,101	767,623	31,190,873
1996	31,421,923	1,961,752	1,889,340	891,673	36,164,688
1997	35,608,931	2,045,489	2,097,631	982,775	40,734,826
1998	39,494,011	2,134,493	2,207,808	1,130,523	44,966,835

SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE

<u>Fiscal Year Ended June 30,</u>	<u>Annuity</u>	<u>Service- Connected Disability</u>	<u>Ordinary</u>	<u>Survivor</u>	<u>Total</u>
1993	1,903	188	304	80	2,475
1994	2,137	198	336	91	2,762
1995	2,188	185	315	100	2,788
1996	2,352	164	321	106	2,943
1997	2,529	168	345	115	3,157
1998	2,713	165	354	129	3,361

SCHEDULE OF AVERAGE MONTHLY BENEFIT AMOUNTS

<u>Fiscal Year Ended June 30,</u>	<u>Annuity (including supplement)</u>	<u>Service- Connected Disability</u>	<u>Ordinary</u>	<u>Survivor</u>	<u>Average (basic benefit only)</u>
1993	\$ 980	\$ 653	\$457	\$622	\$ 799
1994	1,583	727	460	611	813
1995	1,731	815	489	691	893
1996	1,806	1,004	501	743	942
1997	1,874	1,052	510	759	976
1998	1,938	1,104	528	773	1,006